



Filing Date TRANSMITTAL

Son K. Quan First Named Inventor 2831 **FORM** Group Art Unit (to be used for all correspondence after initial filing) Examiner Name Hung V. Ngo

Application Number

09/928,737

August 13, 2001

Total Number of Pages in the	nis Submission	9 Attorney Docket Number	SC09785T CD1	
		ENCLOSURES	(check a	ll that apply)
X Fee Transmittal For	rm	Drawing(s)		wance Communication to
Fee Attached	I	Licensing-Related papers		Communication to Board Is and Interferences
Amendment/Reply		Petition		Communication to
After Final		Petition to Convert to a		Notice, Brief, Reply Brief) ry Information
Affidavits/D	eclaration(s)	Provisional Application	Status Let	ter with appropriate copies
Extension of Time	Request	Power of Attorney, Revocation, Change of Correspondence Address	below)	osure(s) (please identify
Express Abandonm	ent Request	Terminal Disclaimer	Return Pos	
X Information Disclor Form PTO/SB/08	sure Statement &	Request for Refund		
Certified Copy of F Documents	Priority	CD, Number of CDs	_	
Response to Missin Incomplete Applica	-	Remarks		
	to Missing Parts CFR 1.52 or 1.53			
		F APPLICANT, ATTORN	EY, OR AGENT	
Firm or Individual Robert	L. King		Registration No.	30,185
Signature	Robe	A J. King 5 ERTIFICATE OF MAIL IS		
Date	1/19/200	5	_	
	C	ERTIFICATE OF MAILI	NG	
I hereby certify that this co Service with sufficient pos Alexandria, VA 22313-145	tage as first class r	eing facsimile transmitted to the US mail in an envelope addressed to: C I below:	PTO or deposited with Commissioner for Pater	the United States Postal nts, P. O. Box 1450,
Typed or printed name	Pat Thomas			
Signature	Vot V	homas	Date	1-21-05

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<u> </u>			Complete if Known	
JAN . 2 5 2005 E FEE		Application Number	09/928,737	
\		Filing Date	August 13, 2001	
Patent is are subject to annual re Applicant claims small entity status. S	revision	First Named Inventor	Son K. Quan	
Applicant claims small entity status. S	See 37 CFR 1.27	Examiner Name	Hung V. Ngo	
		Group Art Unit	2831	
TOTAL AMOUNT OF PAYMENT (\$)	180	Attorney Docket No.	SC09785T CD1	

METHOD OF PAYMENT (check all that apply)			FE	E CAL	CULATI	ON (continued)	
Check Credit card Money Order Other None	3. ADI	DITIONAL	- FEES				<u> </u>
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Deposit Account Name Freescale Semiconductor,	Code	(\$)	Code	(\$)		Fee Description	
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The Director is authorized to: (check all that apply)	1051	130	2051	65		ge – late filing fee or oath	
X Charge fee(s) indicated below X Credit any overpayments	1052 1053	50 130	2052 1053	25 130		ge – tate Provisional filing plish specification	
Charge any additional fee(s) during the pendency of this application	1812	2520	1812	2520		a request for ex parte	
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FEE CALCULATION	1251	110	2251	55		on for reply within first month	
TEC VALOUENTION	1252	420	2252	210		for reply within second month	
	1253	950	2253	475	Extension	for reply within third month	
1. BASIC FILING FEE	1254	1480	2254	740	Extension	for reply within fourth month	
	1255	2010	2255	1005	Extension	on for reply within fifth month	
Large Entity Small Entity	1401	330	2401	165	Notice o	f Appeal	
Fee Fee Fee	1402	330	2402	165		brief in support of an appeal	
Code (\$) Code (\$) Fee Paid	1403	290	2403	145	Petition	for oral hearing to institute a public use	
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SUBTOTAL (1) (S)	1807	50	1807	50	Process	ing fee under 37 CFR 1.17(q)	
2. EXTRA CLAIM FEES	1806	180	1806	180	Submiss	sion of IDS	180
Previously Extra Fee from Paid** Claims below Fee Paid	8021	40	8021	40		ng each patent assignment erty (times number of properties)	
Total Claims - 20 = X 18 =	1809	770	2809	385	Filing a	submission after final (37 CFR § 1.129(a))	
	1810	770	2810	385	For eac	additional invention to be	
Multiple Dependent Large Entity Small Entity	1801	770	2801	385	Reques	ed (37 CFR § 1.129(b)) t for Continued Examination	
Fee Fee Fee Fee Code (\$) Code (\$) Fee Description	1802	900	1802	900	(RCE	t for expedited examination	
1202 18 2202 9 Claims in excess of 20	1002	500	1002	300		design application	<u> </u>
1201 84 2201 42 Independent claims in excess of 3 1203 280 2203 140 Multiple dependent claim, if not paid	Other fe	e (specify)					
1204 84 2204 42 * Reissue independent claims over original patent	<u> </u>						
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SUBTOTAL (2) (S)					SUI	STOTAL (3) (S) 186	2
or number previously paid, if greater; For Reissues, see above.	* Redu	ced by Ba	sic Filing	Fee Paid		10/10	
SUBMITTED BY			-		Comple	ete (if applicable)	
Name (Print/Type) Robert L. King	<u> </u>	ation No.	30,1	85	Т	elephone 512	.996.6839
Signature Robert Z. Ky	ر <u>مخ</u>			D	ate	1/19/0	2005



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

Son K. Quan et al.

Group Art Unit:

Examiner:

2831

Hung V. Ngo

Date Filed:

Title:

09/928,737

August 13, 2001

SEMICONDUCTOR PACKAGE AND METHOD THEREFOR

CERTIFICATE OF MAILING

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Commissioner For Patents P.O. Box 1450 Alexandria, VA 22313-1450

SIR:

In accordance with 37 C.F.R. §1.56 and in compliance with 37 C.F.R. §1.98, the references listed on attached Form PTO/SB/08 and/or subsequently identified herein, are being submitted herewith for consideration by the United States Patent and Trademark Office. The Office hereby waives the requirement under 37 CFR 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003 and for all international applications that have entered the national stage under 35 USC § 371 after June 30, 2003. See 37 CFR 1.491(b).

1.	COPIES		
	a.🛛		lication or that portion which caused it to be listed; and
		(iii) all other information or that portion which caused it	to be listed, is included herewith.
	b		th are listed on PTO/SB/08 which are not enclosed
		· · · · · · · · · · · · · · · · · · ·	e PTO in one of the following applications which has
		been relied upon for an earlier filing date under 35 U.S.	S.C. §120:
		II S. Serial Number	ILS Filing Date

11. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

- Except as may be indicated below in (b) of this section, all of the patents, publications or other information a. 🖂 are in the English language (concise explanation not required).
- b. 🔯 A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows: English translation is provided for cited references D-12 and D-13.
- The following additional information is provided for the Examiner's consideration: c. \square

CROSS REFERENCE TO RELATED APPLICATION(S) III. 🔲

The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this (these) applications to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. §122.

01/28/2005 MGEBREM1 0098A4040503079

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Filing Date

Art Unit

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IV. [_]	THIS IDS a. □ b. □ c. □ d. □	within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. §1.97(b)(1)). No fee or statement is required. within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. §1.97(b)(2)). No fee or statement is required. before the mailing date of a first Office Action on the merits (37 C.F.R. §1.97(b)(3)). No fee or statement is required. before the mailing date of a first Office Action after the filing of a request for continued examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required.
V. 🗌	before th	E IS BEING FILED UNDER 37 C.F.R. §1.97(c): (check one box) e mailing date of any of a Final Office Action under 37 C.F.R. §1.113, a Notice of Allowance under 37 C.F.R. or an action that otherwise closes prosecution in the application (See 37 C.F.R. §1.97(c)). No statement; therefore, charge Deposit Account 503079, Freescale Semiconductor, Inc. the fee set forth in 37 C.F.R. §1.17(p). See the statement below. No fee is required.
VI. 🖾		S IS BEING FILED UNDER 37 C.F.R. §1.97(d): ore payment of the issue fee and is accompanied by the following: a statement under 37 C.F.R. §1.97(e) as provided below; and charge Deposit Account 503079, Freescale Semiconductor, Inc. the petition fee set forth in §1.17(p).
VII.		each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of IDS; or no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and to knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement, or some of the items of information contained in the IDS were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.
VIII.	PAYMEN	A check in the amount of is enclosed for the above-identified fee(s). Please charge Deposit Account No. 503079, Freescale Semiconductor, Inc. in the amount of \$180.00 for the above-indicated fee(s). If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 503079, Freescale Semiconductor, Inc. Two Copies of this paper are attached for Deposit Account charges and debits.

The above references are being cited only in the interests of candor and without any admission that they constitute statutory prior art or contain matter which anticipates the invention or which would render the same obvious, either singly or in a combination, to a person of ordinary skill in the art.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 503079, Freescale Semiconductor, Inc.

Respectfully submitted, Son K. Quan et al.

Robert L. King

Attorney for Applicant(s)

Reg. No. 30,185 Tel. 512.996.6839

FREESCALE SEMICONDUCTOR, INC. Customer Number 23125

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Enclosures:

Information Disclosure

Statement by Applicant References D-1 thru D-30

Foreign Search Report

Other:



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary) Sheet

	Complete if Known	
Application Number	09/928,737	
Filing Date	August 13, 2001	
First Named Inventor	Son K. Quan et al.	
Group Art Unit	2831	
Examiner Name	Hung V. Ngo	
Attorney Docket No.	SC09785T CD1	

			U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No. 1	Document Number Number -Kind Code² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan Passages or Relevant Figures Appear
	D-1	5,981,314	11-09-1999	Glenn et al.	
	D-2	5,976,912	11-02-1999	Fukutomi et al.	
-	D-3	5,729,437	06-17-1998	Hashimoto	
	D-4	5,450,283	09-12-1995	Lin et al.	
*	D-5	5,280,193	01-18-1994	Lin et al.	
	D-6	4,890,383	01-02-1990	Lumbard et al.	
-	D-7	4,530,152	07-23-1985	Roche et al.	
	D-8	3,606,673	09-21-1971	Overman	
	D-9	3,444,441	05-13-1969	Helda et al.	
	D-10	3,413,713	12-03-1968	Helda et al.	

		FOREIG	N PATENT DOCUM	MENTS		
Examiner Initials*	Cite No. 1	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Ţ6
	D-11	EP 0 261 324 A1	03-30-1988	Bednarz et al.		
	D-12	JP 02-047855	02-16-1990	Akase		
	D-13	WO 95/26047	09-28-1995	Fukutomi et al.		

Examiner	Date		
Signature	 Considered	_	

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¹ Unique citation designation number. ² See Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English Language Translation is attached.

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Complete if Known Application Number 09/928,737 INFORMATION DISCLOSURE Filing Date August 13, 2001 First Named Inventor Son K. Quan et al. STATEMENT BY APPLICANT Group Art Unit 2831 Examiner Name Hung V. Ngo (use as many sheets as necessary) Attorney Docket Number SC09785T CD1 Sheet 2 of

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
	D-14	HOTTA, Yuji et al.; "Foil covered PACkage (FPAC): A New Package concept"; Electronic Components & Techonogy Conference; 1996; Cover Page & pp 1258-1264; IEEE Catalog No. 96CH35931.	-
	D-15	YIP, Laurene et al; "Package Warpage Evaluation for High Performance PQFP"; 45th Electronic Components and Technology Conference;1995; Cover Page & pp 229-233; IEEE Catalog No. 95CH3582-0.	
	D-16	HYSOL® FP4451 Flow Control Dam Product Bulletin; Dexter Electronic Materials Division; 2 pgs; March, 1995.	
	D-17	HYSOL® FP4650 Liquid Encapsulant Product Bulletin; Dexter Electronic Materials Division; 4 pgs; May, 1995.	-
	D-18	BOUTIN, Lynda; "Mold Compound Study for Plastic Ball Grid Array Applications"; Proceedings of the Technical Program, NEPCON EAST '95"; June 12-15, 1995; Cover Page & pp 279-290; Boston.	
	D-19	BURKHART, Art et al.; "New Generation Encapsulants For Chips On Low Cost First Level Substrates"; Dexter Technical Paper; February, 1994; pp 1-8; USA	
	D-20	MANZIONE, Louis T.; "Plastic Packaging of Microelectronic Devices"; AT&T Bell Laboratories Publication; 1990; 4 pgs.	
-	D-21	McPHERSON, J.W. et al; "A Novel Thermal Expansion Matched Heatspreader for Plastic Encapsulation of Silicon Chips"; 25th Annual Proceedings, Reliability Physics 1987; April 7-9, 1987; Cover Page & pp 224-228; IEEE Catalog No. 87CH2388-7.	
	D-22	MURPHY, William; "Custom Molded Cavities"; Technical Papers, Regional Technical Conference, Society of Plastics Engineers, Inc.; March 6-7, 1985; 6 pgs.	

	Examiner	Date	
١	Signature	Considered	

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 Application Number
 09/928,737

 Filing Date
 August 13, 2001

 First Named Inventor
 Son K. Quan et al.

 Group Art Unit
 2831

 Examiner Name
 Hung V. Ngo

 Attorney Docket Number
 SC09785T CD1

Group Art Unit 2831

(use as many sheets as necessary) Examiner Name Hung V. Ngo

Sheet 3 of 3 Attorney Docket Number SC09785T CD1

NON PATENT LITERATURE DOCUMENTS

Examiner Initials**

Cite No. 1 Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
_	D-23	MANGES, Prof. Dr. Georg et al.; "Electric-discharge machining (EDM):; How to Make Injection Molds; 1983; 5 pgs; Hanser Publishers.	
<u>.</u>	D-24	SCHUMACHER, Dr. B.; "The Significance of Electrical Discharge Machining (EDM) IN Mold Making"; Mold-Making Handbook for the Plastics Engineer, Chapter 13, 1983; 17 pgs; MacMillan Publishers, NY.	
<u>. </u>	D-25	HULL, John L; "Equipment and Techniques for Plastic Encapsulation of Electrical and Electronic Devices"; 36th Annual Technical Conference, Society of Plastics Engineers; April 24-27 1978; USA.	
	D-26	CORNER, Harold L.; "The Moldmaking Trades: The Key to Success or Failure of the Plastics Industry"; 36th Annual Technical Conference, Society of Plastics Engineers; April 24-27, 1978; Cover Page & pp 172-174; USA.	
	D-27	FORTIN, M.J.; "Automated Rotary Transfer Encapsulation of Electronic Parts"; 28th Annual Technical Conference, Society of Plastics Engineers, May 4-7, 1970; Cover Page & pp 160-161; USA.	
	D-28	KLUZ, John; "Methods of Producing Cores and Cavities"; Moldmaking and Die Cast Dies for Apprentice Training; Chapter VIII; 1967; National Tool, Die and Precision Machining Association; Washington, D.C.	
	D-29	JAMESON; E.C.; "Electrical Discharge Machining of Mold Cavities ands Cores"; Technical Papers, SPE Regional Technical Conference: Tooling for Plastics-Design and Construction" September 30, 1965; Cover Page & pp 17-21; USA.	
-	D-30	ROSS, Milton I.; "Electric Discharge Cutting of Mold Components"; Technical Papers, SPE Regional Technical Conference-Advances in Moldmaking and Mold Design; April 17, 1964; Cover Page pp 14-18, Society of Plastics Engineers.	
	1		

Examiner	Date
Signature	Considered

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